

CLAIMS

Please amend claims 1, 3, 5, 7, and 8 as follows:

1 1. (Twice amended) A processing system for performing addition and subtraction within
2 limits upon a shared value comprising:

3 means for performing a first uninterruptible operation upon the shared value
4 stored in an affected reservation location, the first uninterruptible operation using an
5 operand;

6 means for comparing a resulting value of the first uninterruptible operation stored
7 in the affected reservation location to an upper value and a lower value to determine if the
8 resulting value is within a range defined by the upper value and the lower value that can
9 be changed [limit values stored in limit locations];

10 means for performing a second uninterruptible operation to restore the affected
11 reservation location if the resulting value of the first uninterruptible operation is not
12 within the range defined by the upper value and the lower value[limit values in the limit
13 locations];

14 means for reporting a failure if the resulting value of the first uninterruptible
15 operation is not within the range defined by the upper value and the lower value [limit
16 values in the limit locations];

17 means for performing a third uninterruptible operation to update an actual value
18 location if the resulting value of the first uninterruptible operation is within the range
19 defined by the upper value and the lower value [limit values in the limit locations];

20 means for performing a fourth uninterruptible operation to update an unaffected
21 reservation location if the resulting value of the first uninterruptible operation is within
22 the range defined by the upper value and the lower value [limit values in the limit
23 locations]; and
24 means for reporting a success if the resulting value of the first uninterruptible
25 operation is within the range defined by the upper value and the lower value [limit values
26 in the limit locations].

- 1 2. (Previously presented) The processing system of claim 1 wherein the first, second,
2 third, and fourth uninterruptible operations are LOCK XADD operations.

1 3. (Twice amended) A processing system for performing addition and subtraction within
2 limits upon a shared value comprising:

3 means for receiving an operand;

4 means for performing a first uninterruptible operation upon the shared
5 value stored in an affected reservation location, the first uninterruptible operation using
6 the operand;

7 means for comparing a resulting value of the first uninterruptible operation
8 stored in the affected reservation location to an upper value and a lower value to
9 determine if the resulting value is within a range defined by the upper value and the lower
10 value that can be changed [limit values stored in limit locations];

11 means for performing a second uninterruptible operation to restore the
12 affected reservation location if the resulting value of the first uninterruptible operation is
13 not within the range defined by the upper value and the lower value [limit values in the
14 limit locations];

15 means for and reporting a failure if the resulting value of the first
16 uninterruptible operation is not within the range defined by the upper value and the lower
17 value [limit values in the limit locations];

18 means for performing a third uninterruptible operation to update an actual
19 value location if the resulting value of the first uninterruptible operation is within the
20 range defined by the upper value and the lower value [limit values in the limit locations];

21 means for performing a fourth uninterruptible operation to update an
22 unaffected reservation location if the resulting value of the first uninterruptible operation

23 is within the range defined by the upper value and the lower value [limit values in the
24 limit locations]; and
25 means for reporting a success if the resulting value of the first
26 uninteruptible operation is within the range defined by the upper value and the lower
27 value [limit values in the limit locations].

1 4. (Previously presented) The processing system of claim 3 wherein the first,
2 second, third, and fourth uninteruptible operations are LOCK XADD operations.

1 5. (Twice amended) A method for performing addition and subtraction within
2 limits upon a shared value comprising the steps of:
3 first, performing a first uninterruptible operation upon the shared value
4 stored in an affected reservation location, the first uninterruptible operation using an
5 operand;
6 second, comparing a resulting value of the first uninterruptible operation
7 stored in the affected reservation location to an upper value and a lower value to
8 determine if the resulting value is within a range defined by the upper value and the lower
9 value that can be changed [limit values stored in limit locations];
10 third, performing a second uninterruptible operation to restore the affected
11 reservation location;
12 fourth, reporting a failure if the resulting value is not within the range
13 defined by the upper value and the lower value [limit values in the limit locations];
14 fifth, performing a third uninterruptible operation to update an actual value
15 location if the resulting value is within the range defined by the upper value and the lower
16 value [limit values in the limit locations];
17 sixth, performing a fourth uninterruptible operation to update an
18 unaffected reservation location if the resulting value is within the range defined by the
19 upper value and the lower value [limit values in the limit locations]; and
20 seventh, reporting a success if the resulting value is within the range
21 defined by the upper value and the lower value [limit values in the limit locations].

1 6. (Previously presented) The method of claim 5 wherein the first, second, third,
2 and fourth uninterruptible operations are LOCK XADD operations.

1 7. (Twice amended) A computer readable medium containing computer readable
2 code comprising:

3 a code segment for performing a first uninterruptible operation upon the
4 shared value stored in an affected reservation location, the first uninterruptible operation
5 using an operand;

6 a code segment for comparing a resulting value of the first uninterruptible
7 operation stored in the affected reservation location to an upper value and a lower value
8 to determine if the resulting value is within a range defined by the upper value and the
9 lower value that can be changed [limit values stored in limit locations];

10 a code segment for performing a second uninterruptible operation to
11 restore the affected reservation location;

12 a code segment for reporting a failure if the resulting value is not within
13 the range defined by the upper value and the lower value [limit values in the limit
14 locations];

15 a code segment for performing a third uninterruptible operation to update
16 an actual value location if the resulting value is within the range defined by the upper
17 value and the lower value [limit values in the limit locations];

18 a code segment for performing a fourth uninterruptible operation to update
19 an unaffected reservation location if the resulting value is within the range defined by the
20 upper value and the lower value [limit values in the limit locations]; and

21 a code segment for reporting a success if the resulting value is within the
22 range defined by the upper value and the lower value [limit values in the limit locations].

1 8. (Twice amended) A processing system for performing addition and
2 subtraction within limits upon a shared value comprising:
3 a processor, the processor
4 performing a first uninterruptible operation upon the shared value
5 stored in an affected reservation location, the first uninterruptible operation using an
6 operand;
7 comparing a resulting value of the first uninterruptible operation
8 stored in the affected reservation location to an upper value and a lower value to
9 determine if the resulting value is within a range defined by the upper value and the lower
10 value that can be changed [limit values stored in limit locations];
11 performing a second uninterruptible operation to restore the
12 affected reservation location if the resulting value of the first uninterruptible operation is
13 not within the range defined by the upper value and the lower value [limit values in the
14 limit locations];
15 reporting a failure if the resulting value of the first uninterruptible
16 operation is not within the range defined by the upper value and the lower value [limit
17 values in the limit locations];
18 performing a third uninterruptible operation to update an actual
19 value location if the resulting value of the first uninterruptible operation is within the
20 range defined by the upper value and the lower value [limit values in the limit locations];

21 performing a fourth uninterruptible operation to update an
22 unaffected reservation location if the resulting value of the first uninterruptible operation
23 is within the range defined by the upper value and the lower value [limit values in the
24 limit locations]; and
25 reporting a success if the resulting value of the first uninterruptible
26 operation is within the range defined by the upper value and the lower value [limit values
27 in the limit locations].